

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form O-122

RECORDED

45F
File

APR 10 '89

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 12/31/88	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company	
Pool <u>Abc Pecos Slope ACO</u>				Formation Pecos Slope	
Completion Date 1/21/83		Total Depth 4200.0'		Elevation 3623.4'	
Csg Size 4.500"		Wt. 9.500#		Perforations: From 3682.0' To 3816.0'	
Tbg Size 2.375"		Wt. 4.700#		Perforations: From 0.0' To 0.0'	
Type Well Single				Packer Set At 3648.0'	
Producing Thru Tubing		Resv. Temp. °F 100 @ 3749'		Baro. Press. - Pa 13.2 psia.	
L 3648.0'		H 3648.0'		Gg .647	
XCO2 .03		XN2 5.76		XH2S 0.00	
Prover 0.000"		Meter Run 2.000"		Taps Flange	

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow
NO	Prover Orifice Size X Size	Press. psig	Diff. hw	Temp. °F	Press. psig	Temp. °F	Press. psig	Temp. °F	
SI	0.000 X 0.000	0	0.0	50	740	0	0	0	0 hrs.
1.	2.067 X 1.125	145	20.5	52	581	62	0	0	24 hrs.
2.	2.067 X 1.125	145	29.5	51	533	62	0	0	24 hrs.
3.	2.067 X 1.125	185	45.6	50	409	62	0	0	24 hrs.
4.	2.067 X 1.125	220	50.0	55	250	62	0	0	24 hrs.
5.	0.000 X 0.000	0	0.0	0	0	0	0	0	0 hrs.

RATE OF FLOW CALCULATIONS

NO	Coefficient (24 HOUR)	$\sqrt{hw/Pm}$	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	6.397	56.95	158.20	1.008	1.243	1.013	462
2.	6.397	68.31	158.20	1.009	1.243	1.013	555
3.	6.397	95.07	198.20	1.010	1.243	1.017	776
4.	6.397	107.98	233.20	1.005	1.243	1.020	880
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

NO	Pr	Temp. °R	Tr	Z	Gas Liquid Hydrocarbon Ratio Dry Mcf/bbl.
1.	.24	512	1.44	.975	A.P.I. Gravity of Liquid Hydrocarbons 0.000 Deg.
2.	.24	511	1.44	.974	Specific Gravity Separator Gas .647
3.	.30	510	1.44	.967	Specific Gravity Flowing Fluid .647
4.	.35	515	1.45	.962	Critical Pressure 660.8 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature 355.3°R

Pc 753.2		Pc2 567.3	
NO	Pt2	Pw	Pw2
1.	353.1	596.5	355.8
2.	298.3	549.8	302.3
3.	178.3	431.4	186.1
4.	69.3	282.2	79.6
5.	0.0	0.0	0.0

$$Pc2 - Pw2(1) = \frac{Pc2}{Pc2 - Pw2} = 1.1657 \quad (2) \left[\frac{Pc2}{Pc2 - Pw2} \right]^n = 1.1248$$

$$AOF = Q \left[\frac{Pc2}{Pc2 - Pw2} \right]^n = 989 \text{ Mcfd}$$

Absolute Open Flow 989 Mcfd @ 15.025 Angle of Slope, θ 37 Slope, n .767
Remarks:

Approved By:	Conducted By: David Weaver	Calculated By: Andrea Carpenter	Checked By:
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